

## ABSTRACT OF THE DISCLOSURE

A low power circuit for providing power and control signals to a low noise block converter of a satellite receiver over a single coaxial cable includes a tracking switch-  
5 mode power supply. The power and control signals have a DC voltage level selected from a plurality of DC voltage levels and are modulated by an analog AC tone signal. The switch-mode power supply provides a regulated output voltage which tracks the selected DC voltage level. The regulated output voltage provides the input voltage to an adjustable linear amplifier which generates an output voltage having the selected DC  
10 voltage level modulated by the analog AC tone signal.